



**SUBSTITUTE SPECIFICATION**

**PATENT APPLICATION**

**TITLE:** METHOD AND APPARATUS FOR CLEANING A FRACTURED  
INTERVAL BETWEEN TWO PACKERS

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**CROSS-REFERENCE TO RELATED APPLICATIONS**

[0001] This application claims priority from Provisional Application 60/422,543,  
filed October 31, 2002, which is incorporated herein by reference.

**BACKGROUND OF THE INVENTION**

**Field of the Invention**

[0002] This invention pertains generally to wells for production of petroleum products from subsurface earth formations and more particularly concerns completion systems for wells, including formation fracturing and other treatment for enhancement of well production. Even more specifically, the present invention concerns a method and apparatus for cleaning a fractured or otherwise treated perforated casing interval between spaced packers to permit repositioning or removal of the apparatus.

**[0003] Description of Related Art**

[0004] When a fracturing treatment is performed on a zone isolated by packers, two problems are prevalent: 1) erosion of the tool and casing due to high velocity flow of abrasive fluids, and 2) cleanup of slurry/proppant in the annular area between the casing and the isolation tool. This invention addresses both of these issues.